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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,054	02/05/2001	William R. Bullman	BULLMAN 5-2-2-4	8680

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EXAMINER

VINCENT, DAVID ROBERT

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/777,054

Applicant(s)

BULLMAN ET AL.

Examiner

David R Vincent

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☒ Claim(s) 40 and 41 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: ____ |

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Claim Objections

1. Claims 37-40 are objected to because of the following informalities: claim 37 specifies a packet having a system. The claim should be written to indicate e.g., the packet is used in a system which sends various types of packets. Also, the packet type should indicate if the applicant is referring to a specific field in a packet, else packet type must be read more broadly. Appropriate correction is required.

2. Although the claims refer to the phrase "piggyback packet", the applicant has defined this as being a packet that does not actually have to piggyback data at all (pg. 16, section 33, last four lines of page). This is a clear contradiction of the term.

3. The claims are far too broad in their present condition. They do not bring specify details of figure 4, and with the statement about how a piggyback packet does not even have to piggyback data and can be sent by itself, there are many protocols and references that will read on the claims. The applied art was chosen because the examiner feels this art will give the applicant a very good idea of how to amend the claims.

When referencing the OSI model the applicant should keep in mind that the term "packets" typically refer to data at the layer-3 and the term "frames" typically refers to data at the DLL or layer 2 or layer-1. Although the applicant chose to use

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terms such as generator and correlator, one of ordinary skill would understand this processing is all done in software and the so called generator and correlator merely amount to lines of code, drivers, or subroutines.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 13, and 25 specify a packet "containing" characteristics when the specification defines the packet as comprising other data as well.

6. Due to the indefiniteness of the limitation as explained in the 35 USC § 112 rejection, the following rejections are based upon the broadest interpretation of the claims, disregarding the limitation of the packet "containing" characteristics. It is assumed that the packet has more data than just the characteristics.

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Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin's text book LANs.

Martin discloses a Physical layer, (PHY, e.g., Fig. 6.10, pg. 100; Fig. 6.11, pgs. 104, 205), Data Link Layer (DLL, e.g., pgs. 100, 104, 205), media (should be medium) access control (MAC, e.g., pgs. 100, 104, 205), translation system (not further defined; reads on any computer, router, bridge, etc. that receives and transmits data and in the process reads data), a generator (the device, or software/driver which creates a OSI layer(s) or part of a frame) which constructs a "piggyback" packet (e.g., packets or frames for each of the various protocols, Box 6.3, pg. 103; Fig. 6.12, pg. 105, pg. 107; frame with SNAP header and a protocol ID, pgs. 112-113) comprising characteristics associated with the PHY (the Ethernet headers have a "type field" and the Ethernet SNAP frames have protocol ID, the various types of LAN frames can be 802.4 Token Bus, 802.5 Token Ring, Ethernet, 802.3, FDDI, 802.3u Fast Ethernet, 802.12 100VG-AnyLAN, 802.11 WLAN, all of which may have different physical mediums, pg. 206), a correlator which receives said piggyback packet and extracts data about the PHY,

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extracting without "substantial" modification to MAC (certainly an OSI layer above the MAC which receives data from the MAC would not modify the transmitter/MAC), communication system is wireless (WLAN, pg. 13, 19, 21-22), characteristics are interface characteristics (reads on MAC address comprising a vendor and serial number of a network interface card/NIC, pgs. 106-108), transmission line characteristics (an Ethernet frame describes which type pg. 204, of standard and transmission line is being used, e.g., Token bus uses a "frame control field", 802.3 uses a length field, Ethernet version 2 uses a type field, SNAP uses a protocol ID, e.g., pgs. 13, 19-22, 103; 204, 214-216, 236), sets a flag (reads on setting I/G bit in 802.3 type frame which indicates whether the network is a VLAN or Ethernet, pg. 109), generator is in PHY (the term generator is merely referring to the software/driver which creates part of a frame), passing data to a subsystem (reads on sending data to upper layer of OSI model or separate LAN), correlator is in the DLL (the term correlator is merely referring to the software/driver which reads the frames being passed up the OSI model from the lower/MAC/PHY layers), as specified in claims 1-36.

Claim Rejections - 35 USC § 102

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of

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section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American

Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 37-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Furuskar (US 6,704,898).

As shown in Fig. 6A, Furuskar discloses a piggyback packet with a physical layer (PHY inherent for transmission over air interface), a DLL (LLC is part of DLL, Figs. 1, 4), a packet type (various types disclosed in Fig. 6A; claim fails to specify what is meant by packet type and clearly does not define any specific frame structure nor fields), a modulation type (Fig. 6A and respective disclosure, col. 1, lines 29-45; col. 2, lines 26-67), and a receive packet information type (Fig. 6A and respective disclosure, col. 1, lines 29-45; col. 2, lines 26-67), as specified in claims 37-38.

2. Claims 39-40 would be allowable if rewritten to overcome the objection, set forth in this Office action and to include

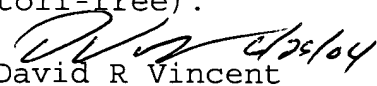
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all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David R Vincent whose telephone number is 703 305 4957. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on 703 305 4703. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David R Vincent
Primary Examiner
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June 29, 2004